

State of North Carolina

Infrastructure Study and Assessment (INSA)

Recommendations

March 30, 2011
Revised

Assessment Findings and Recommendations

Executive Summary

- State organizations and employees involved in delivering IT infrastructure services have operated in a less than optimal environment with regard to securing adequate funding necessary to support agency mission requirements. This challenging environment has only been exacerbated by the Great Recession's impact on state government budgets, which has led to further declines in funding for IT infrastructure services – resulting in lowering of service provisioning levels and increasing the risk profiles for states.
- The State has been fortunate to not have experienced significant IT infrastructure service outages in light of the findings of the assessment.
- The absence of significant IT infrastructure services outages is due in great measure to the hard work and dedication of the State's organizations and staff responsible for delivering those services.

Alternative Scenario Development Basis for INSA Alternatives Development / Selection

- **Improve INSA agency IT Infrastructure service costs and quality**
- **Alternatives analysis framed against two methods**
 - Sourcing of all or select IT Infrastructure services towers to an external service provider
 - Consolidation of all or select IT Infrastructure services tower to ITS
- **Apply data from Baseline Assessment, Operational Assessment and Mark-to-Market (M2M) results to aid in identifying viable alternatives**
 - Supplemented with TPI experience and sourcing insights

Alternatives List - Sourcing

Added one (1) additional Alternative to the Sourcing Alternatives

Ref #	Alternative	Description
1	Sourcing all Towers all Agencies	Complete sourcing of all State infrastructure - all Agencies, all Towers - Mainframe, Servers, EUC, WAN, Voice, LAN, and Service Desk.
2	Sourcing all Mainframe	Source the complete Mainframe Tower.
3	Sourcing all WAN	Source the complete WAN Tower
4	Sourcing all Voice	Source the complete Voice Tower
5	Sourcing all LAN	Source the complete LAN Tower
6	Sourcing all WAN and all Voice	Source the complete WAN and Voice Towers
7	Sourcing all WAN, all Voice and all LAN	Source the complete WAN, Voice and LAN Towers
8	Sourcing all Servers	Source all Servers for all Agencies
9	Sourcing all Mainframe and all Agency Servers	Source the complete Mainframe Tower and all Servers for all Agencies.
10	Sourcing all Mainframe and all Servers from select Agencies – ESC, DHHS, CCPS, and WRC.	Source all of the Mainframe Tower and all Servers for Agencies above the market range. Agencies above the market range are: ESC, DHHS, CCPS and WRC.
11	Sourcing all EUC	Source all EUC for all Agencies
12	Source all ITS EUC	Source EUC for Agencies above the market range. The only Agency above the market range is ITS.
13	Sourcing all Service Desks	Source all Service Desk for all Agencies
14	Sourcing all DOR, ESC, and WRC Service Desks	Source Service Desk for Agencies above the market range. The Agencies above the market range are: DOR, ESC, WRC
26	Sourcing all Servers from select Agencies – ESC, CCPS, DHHS and WRC.	Source servers for Agencies above the market range - ESC, CCPS, DHHS and WRC

Alternatives List – Consolidated

Ref #	Alternative	Description
15	Consolidate into ITS all Towers all Agencies	Complete consolidation of all State infrastructure - all Agencies, all Towers into ITS. Towers include: Mainframe, Servers, EUC, WAN, Voice, LAN and Service Desk.
16	Consolidate into ITS WAN	Consolidate the complete WAN Tower
17	Consolidate into ITS Voice	Consolidate the complete Voice Tower
18	Consolidate into ITS LAN	Consolidate the complete LAN Tower
19	Consolidate into ITS WAN and Voice	Consolidate the complete WAN and Voice Towers into ITS
20	Consolidate into ITS WAN, Voice and LAN	Consolidate the complete WAN, Voice and LAN Towers into ITS
21	Consolidate into ITS all non-consolidated Servers	Consolidate all non-consolidated Servers for all Agencies into ITS
22	Consolidate into ITS Servers from select Agencies – ESC, CCPS, DHHS, DOT, WRC	Consolidate Servers for Agencies above ITS. Agencies above ITS are: ESC, CCPS, DHHS, DOT, and WRC.
23	Consolidate into ITS all non-consolidated EUC	Consolidate all non-consolidated EUC into ITS
24	Consolidate into ITS all non-consolidated Service Desks	Consolidate all non-consolidated Service Desks into ITS
25	Consolidate into ITS Service Desk from selected Agencies - DOR, ESC, WRC, DENR, CCPS	Consolidate service desk for Agencies above ITS's Service Desk cost into ITS - DOR, ESC, WRC, DENR, CCPS

Performance Factor Scoring Matrix

Decision Selection Criteria	ID	Performance Rating Factors	1	2	3	4	5
Cost Management	1	Estimated Saving	<5%	5<10%	10<15%	15<20%	>20%
	2	Capital Costs	High		Moderate		Low
	3	Transition Costs	High		Moderate		Low
Risk Management	4	Business Risk	Increased		Neutral		Reduced
	5	Service Delivery Model Change	Significant		Moderate		Minor
	6	Transition timeframe	> 24 months	> 18 < 24 months	> 12 < 18 months	> 6 < 12 months	< 6 months
	7	Organization Readiness	Unprepared		Capable		Prepared
	8	Difficulty of Transition	High		Moderate		Low
Service Management	9	Performance Improvement	Low		Moderate		High
	10	Customer Satisfaction	Lessened		Neutral		Improved
	11	Service Governance Complexity	High		Moderate		Low
	12	Service Levels	Very limited to no service levels	Significantly below market level	Below market level	Near market level	At market level

Performance Factor Weighting

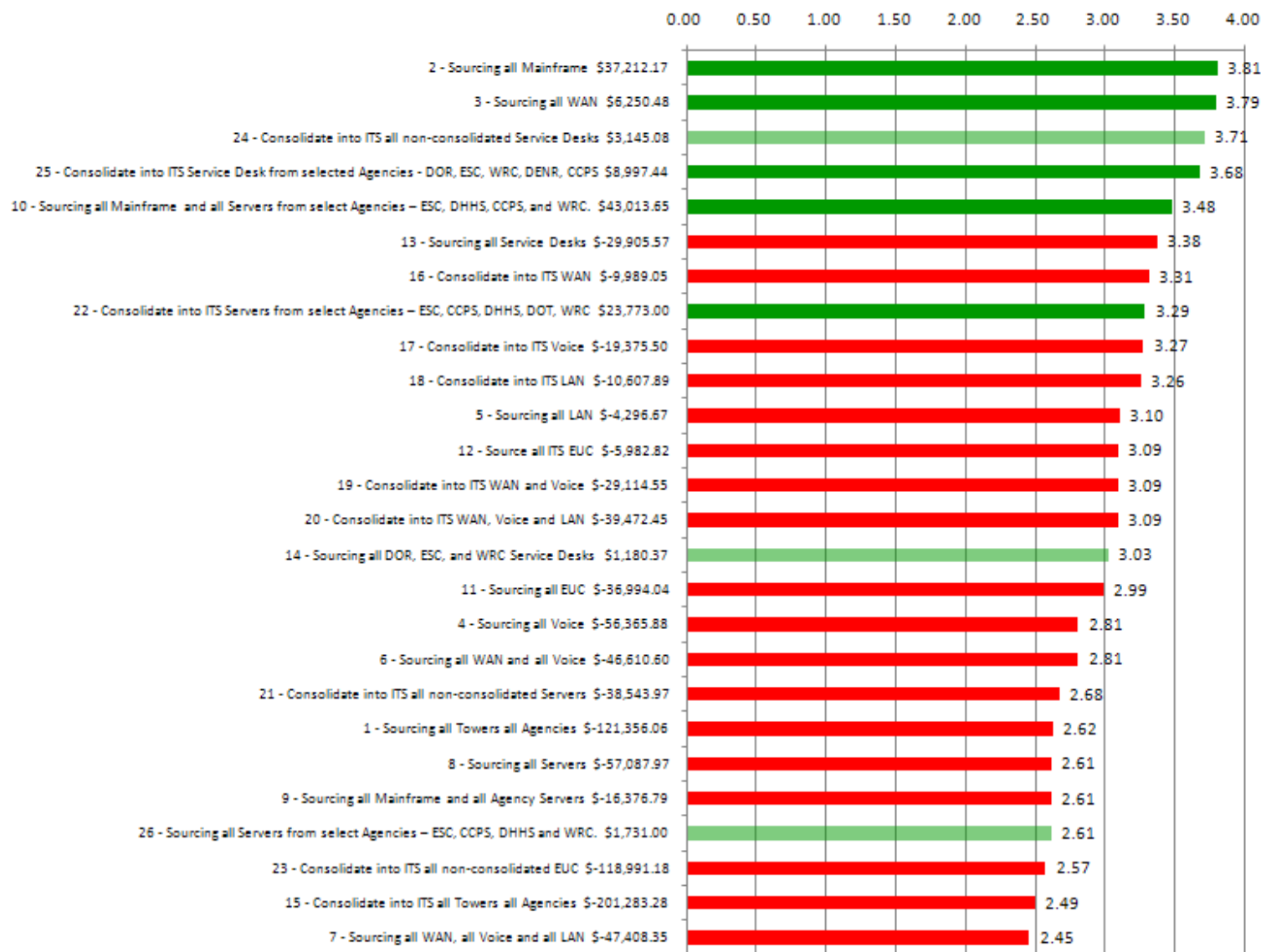
Performance Rating Factor	Weight
Estimated Saving	10
Capital Costs	7
Transition Costs	7
Business Risk	5
Service Delivery Model Change	4
Transition timeframe	5
Organization Readiness	3
Difficulty of Transition	5
Performance Improvement	9
Customer Satisfaction	9
Service Governance Complexity	4
Service Levels	9

Alternatives Scoring Matrix

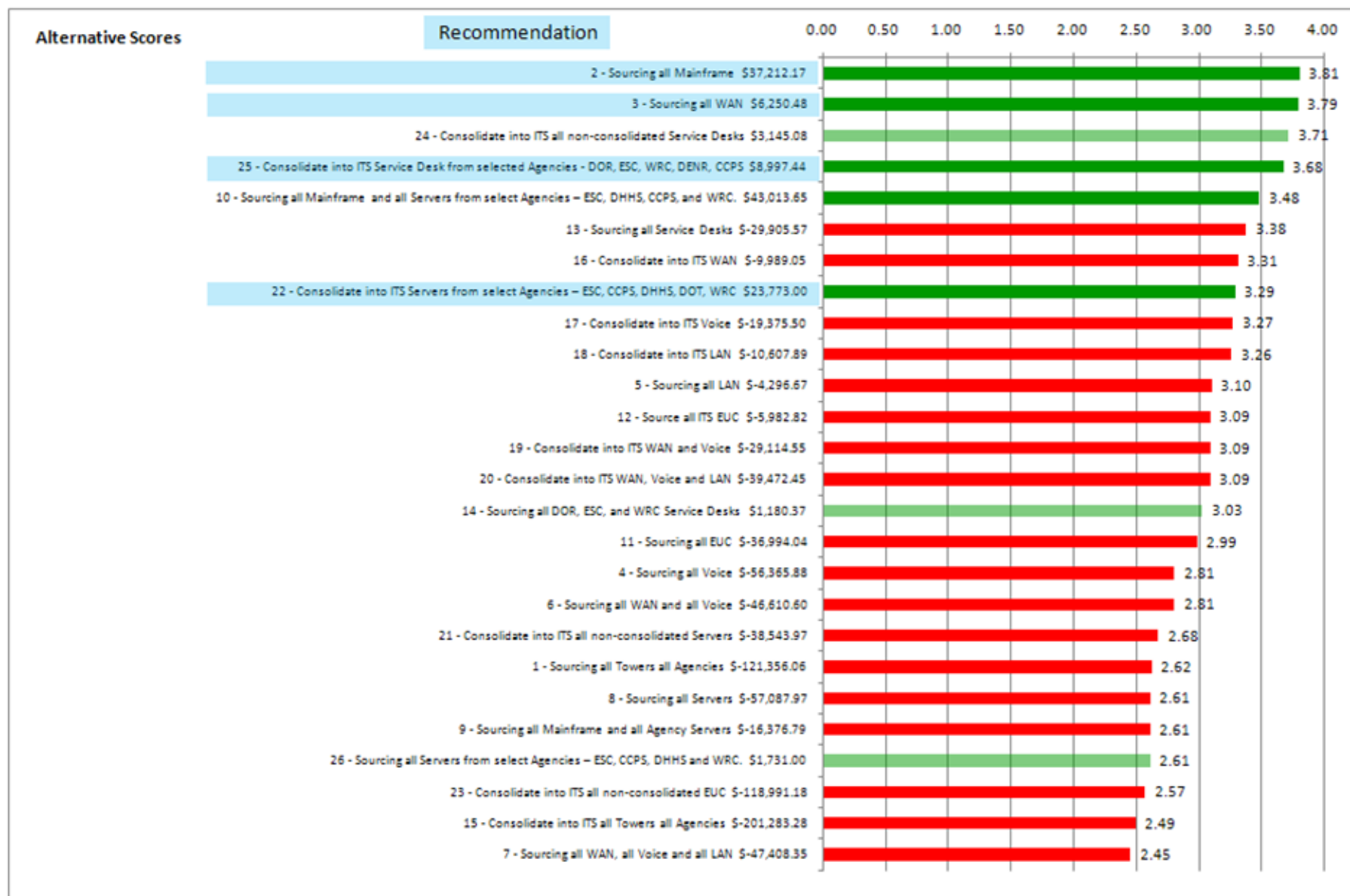
Infrastructure Performance Rating Factors																		Weighted Score
ID	Sceanrio	Basecase \$ (000's)	Estimated \$ Savings (000's)	Basecase % Savings	Estimated Saving	Capital Costs	Transition Costs	Business Risk	Service Delivery Model Change	Transition timeframe	Organization Readiness	Difficulty of Transition	Performance Improvement	Customer Satisfaction	Service Governance Complexity	Service Levels		
2	2 - Sourcing all Mainframe	\$ 206,154.06	\$ 37,212.17	18.1%	4.00	5.00	4.00	2.00	4.00	4.00	3.00	4.00	3.00	3.00	4.00	5.00	3.81	
3	3 - Sourcing all WAN	\$ 107,734.15	\$ 6,250.48	5.8%	2.00	4.00	3.00	2.00	3.00	5.00	3.00	4.00	5.00	5.00	3.00	5.00	3.79	
24	24 - Consolidate into ITS all non-consolidated Service Desks	\$ 25,128.76	\$ 3,145.08	12.5%	3.00	5.00	5.00	3.00	5.00	4.00	3.00	5.00	3.00	3.00	4.00	3.00	3.71	
25	25 - Consolidate into ITS Service Desk from selected Agencies - DOR, ESC, WRC, DENR, CCPS	\$ 13,392.94	\$ 8,997.44	67.2%	5.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00	3.00	3.00	4.00	3.00	3.68	
10	10 - Sourcing all Mainframe and all Servers from select Agencies – ESC, DHHS, CCPS, and WRC.	\$ 283,039.98	\$ 43,013.65	15.2%	4.00	4.00	3.00	2.00	2.00	3.00	2.00	3.00	4.00	4.00	2.00	5.00	3.48	
13	13 - Sourcing all Service Desks	\$ 28,628.48	\$ (29,905.57)	-104.5%	1.00	4.00	4.00	2.00	4.00	3.00	3.00	4.00	4.00	3.00	4.00	5.00	3.38	
16	16 - Consolidate into ITS WAN	\$ 107,734.15	\$ (9,989.05)	-9.3%	1.00	5.00	5.00	3.00	4.00	4.00	4.00	4.00	2.00	3.00	5.00	3.00	3.31	
22	22 - Consolidate into ITS Servers from select Agencies – ESC, CCPS, DHHS, DOT, WRC	\$ 117,396.00	\$ 23,773.00	20.3%	5.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00	3.00	3.00	4.00	3.00	3.29	
17	17 - Consolidate into ITS Voice	\$ 163,497.14	\$ (19,375.50)	-11.9%	1.00	3.00	4.00	4.00	4.00	4.00	4.00	3.00	4.00	3.00	5.00	3.00	3.27	
18	18 - Consolidate into ITS LAN	\$ 57,898.42	\$ (10,607.89)	-18.3%	1.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	2.00	3.00	5.00	3.00	3.26	
5	5 - Sourcing all LAN	\$ 57,898.42	\$ (4,296.67)	-7.4%	1.00	4.00	4.00	2.00	3.00	4.00	3.00	4.00	2.00	3.00	3.00	5.00	3.10	
12	12 - Source all ITS EUC	\$ 37,016.26	\$ (5,982.82)	-16.2%	1.00	1.00	1.00	4.00	2.00	4.00	3.00	2.00	5.00	5.00	3.00	5.00	3.09	
19	19 - Consolidate into ITS WAN and Voice	\$ 271,231.30	\$ (29,114.55)	-10.7%	1.00	3.00	4.00	3.00	4.00	4.00	4.00	3.00	3.00	3.00	5.00	3.00	3.09	
20	20 - Consolidate into ITS WAN, Voice and LAN	\$ 329,129.72	\$ (39,472.45)	-12.0%	1.00	3.00	4.00	3.00	4.00	4.00	4.00	3.00	3.00	3.00	5.00	3.00	3.09	
14	14 - Sourcing all DOR, ESC, and WRC Service Desks	\$ 7,046.94	\$ 1,180.37	16.8%	4.00	5.00	2.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.03	
11	11 - Sourcing all EUC	\$ 213,318.05	\$ (36,994.04)	-17.3%	1.00	1.00	2.00	3.00	2.00	3.00	3.00	2.00	4.00	5.00	4.00	5.00	2.99	
4	4 - Sourcing all Voice	\$ 163,497.14	\$ (56,365.88)	-34.5%	1.00	1.00	2.00	2.00	3.00	2.00	3.00	3.00	5.00	3.00	3.00	5.00	2.81	
6	6 - Sourcing all WAN and all Voice	\$ 271,231.30	\$ (46,610.60)	-17.2%	1.00	1.00	2.00	2.00	3.00	2.00	3.00	3.00	5.00	3.00	3.00	5.00	2.81	
21	21 - Consolidate into ITS all non-consolidated Servers	\$ 151,315.73	\$ (38,543.97)	-25.5%	1.00	2.00	4.00	4.00	3.00	2.00	3.00	3.00	3.00	2.00	4.00	3.00	2.68	
1	1 - Sourcing all Towers all Agencies	\$ 933,565.92	\$ (121,356.06)	-13.0%	1.00	2.00	1.00	2.00	1.00	3.00	1.00	1.00	5.00	4.00	2.00	5.00	2.62	
8	8 - Sourcing all Servers	\$ 156,335.62	\$ (57,087.97)	-36.5%	1.00	2.00	4.00	2.00	1.00	3.00	1.00	3.00	3.00	2.00	3.00	5.00	2.61	
9	9 - Sourcing all Mainframe and all Agency Servers	\$ 362,489.68	\$ (16,376.79)	-4.5%	1.00	2.00	4.00	2.00	1.00	3.00	1.00	3.00	3.00	2.00	3.00	5.00	2.61	
26	26 - Sourcing all Servers from select Agencies – ESC, CCPS, DHHS and WRC.	\$ 76,886.00	\$ 1,731.00	2.3%	1.00	2.00	4.00	2.00	1.00	3.00	1.00	3.00	3.00	2.00	3.00	5.00	2.61	
23	23 - Consolidate into IT S all non-consolidated EUC	\$ 189,249.58	\$ (118,991.18)	-62.9%	1.00	1.00	2.00	4.00	3.00	3.00	3.00	2.00	3.00	3.00	5.00	3.00	2.57	
15	15 - Consolidate into ITS all T owers all Agencies	\$ 933,565.92	\$ (201,283.28)	-21.6%	1.00	3.00	3.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	3.00	3.00	2.49	
7	7 - Sourcing all WAN, all Voice and all LAN	\$ 329,129.72	\$ (47,408.35)	-14.4%	1.00	1.00	2.00	2.00	3.00	2.00	3.00	3.00	2.00	3.00	3.00	5.00	2.45	

Alternatives Ranking – Based on Overall Weighted Score

Alternative Scores



Recommended Alternatives



Recommended Alternatives - Scoring - \$ Savings - % Savings

ID	Scenario	Estimated \$ Savings (000's)	Basecase % Savings	Weighted Score
2	2 - Sourcing all Mainframe	\$ 37,212.17	18.1%	3.81
3	3 - Sourcing all WAN	\$ 6,250.48	5.8%	3.79
24	24 - Consolidate into ITS all non-consolidated Service Desks	\$ 3,145.08	12.5%	3.71
25	25 - Consolidate into ITS Service Desk from selected Agencies - DOR, ESC, WRC, DENR, CCPS	\$ 8,997.44	67.2%	3.68
10	10 - Sourcing all Mainframe and all Servers from select Agencies – ESC, DHHS, CCPS, and WRC.	\$ 43,013.65	15.2%	3.48
13	13 - Sourcing all Service Desks	\$ (29,905.57)	-104.5%	3.38
16	16 - Consolidate into ITS WAN	\$ (9,989.05)	-9.3%	3.31
22	22 - Consolidate into ITS Servers from select Agencies – ESC, CCPS, DHHS, DOT, WRC	\$ 23,773.00	20.3%	3.29
17	17 - Consolidate into ITS Voice	\$ (19,375.50)	-11.9%	3.27
18	18 - Consolidate into ITS LAN	\$ (10,607.89)	-18.3%	3.26
5	5 - Sourcing all LAN	\$ (4,296.67)	-7.4%	3.10
12	12 - Source all ITS EUC	\$ (5,982.82)	-16.2%	3.09
19	19 - Consolidate into ITS WAN and Voice	\$ (29,114.55)	-10.7%	3.09
20	20 - Consolidate into ITS WAN, Voice and LAN	\$ (39,472.45)	-12.0%	3.09
14	14 - Sourcing all DOR, ESC, and WRC Service Desks	\$ 1,180.37	16.8%	3.03
11	11 - Sourcing all EUC	\$ (36,994.04)	-17.3%	2.99
4	4 - Sourcing all Voice	\$ (56,365.88)	-34.5%	2.81
6	6 - Sourcing all WAN and all Voice	\$ (46,610.60)	-17.2%	2.81
21	21 - Consolidate into ITS all non-consolidated Servers	\$ (38,543.97)	-25.5%	2.68
1	1 - Sourcing all Towers all Agencies	\$ (121,356.06)	-13.0%	2.62
8	8 - Sourcing all Servers	\$ (57,087.97)	-36.5%	2.61
9	9 - Sourcing all Mainframe and all Agency Servers	\$ (16,376.79)	-4.5%	2.61
26	26 - Sourcing all Servers from select Agencies – ESC, CCPS, DHHS and WRC.	\$ 1,731.00	2.3%	2.61
23	23 - Consolidate into ITS all non-consolidated EUC	\$ (118,991.18)	-62.9%	2.57
15	15 - Consolidate into ITS all Towers all Agencies	\$ (201,283.28)	-21.6%	2.49
7	7 - Sourcing all WAN, all Voice and all LAN	\$ (47,408.35)	-14.4%	2.45

State of North Carolina

Infrastructure Study and Assessment (INSA)

Recommendations

Recommendation 1:

Outsource Mainframe Services Details

Recommendation 1 - Outsource Mainframe Services

Scope

- External Service Provider provides Mainframe Services from their facilities / data centers using their equipment and staff
- Includes all hardware, software and associated support functions
- Mainframe Disaster Recovery Services included as part of External Service Provider services

Financial Benefits

- Cost savings estimated at \$37.2 million over five (5) years
- Shifts costs to variable/consumption basis – more efficiently accommodates shifts in demand
- Eliminates future capital costs associated with equipment upgrades

Other Benefits

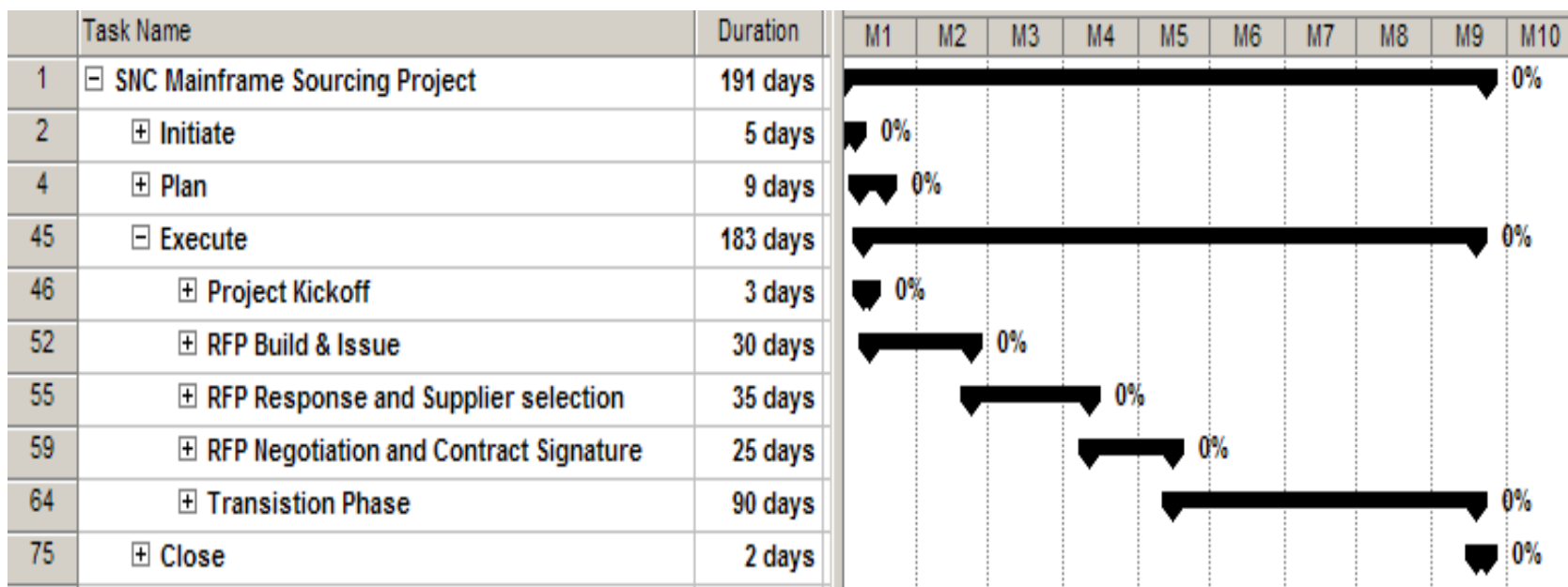
- Upgrade of Service Levels to market norms
- Eliminates challenges of maintaining, retaining and attracting staff with requisite skill sets
- Elevates operational maturity and process discipline

Recommendation 1 – Financial Model

State of North Carolina - INSA		
Alternative # 2 - Sourcing all Mainframe Summary		
Financial Summary - One Year Total		
Current Costs (Operating & Capital)	\$41,230,812	recurring
New Cost (Operating & Capital):		
Project Investment (Capital)	\$0	
Project One-Time Costs	\$10,089,402	
Total Project Costs	\$10,089,402	
Future Costs (Operating & Capital)	\$31,770,497	
Total Estimated Savings	(\$629,087)	-2% Savings
Return on Investment (ROI)	-6%	
Financial Summary - Five Year Total		
1st year Return on Investment (ROI)	-6%	
Total ROI	369%	
Total Project Costs	\$10,089,402	
Projected Capital Savings	\$0	
Projected Operating Savings	\$37,212,172	
Total 5 Year Savings	\$37,212,172	
Annual Recurring Savings / (Cost Increase)	23%	by 2 nd year
Total 5 Year Savings / (Cost Increase)	18%	
Net Present Value (NPV) @ SNC 0.97%	\$35,866,256	
Internal Rate of Return (IRR)	90%	
Payback Period	1.1 Year(s)	

Recommendation 1 – High Level Transition Plan

Estimated to be a 9 Month Procurement and Transition Project



State of North Carolina

Infrastructure Study and Assessment (INSA)

Recommendations

Recommendation 2:

Outsource WAN Services Details

Recommendation 2 - Outsource WAN Services

Scope

- External Service Provider provides managed network services including:
 - Network monitoring and management
 - Planning and design services
 - Network connectivity and operations services
 - Network provisioning management

Financial Benefits

- Cost savings estimated at \$6.2 million over five (5) years
- One (1) year pay-back

Other Benefits

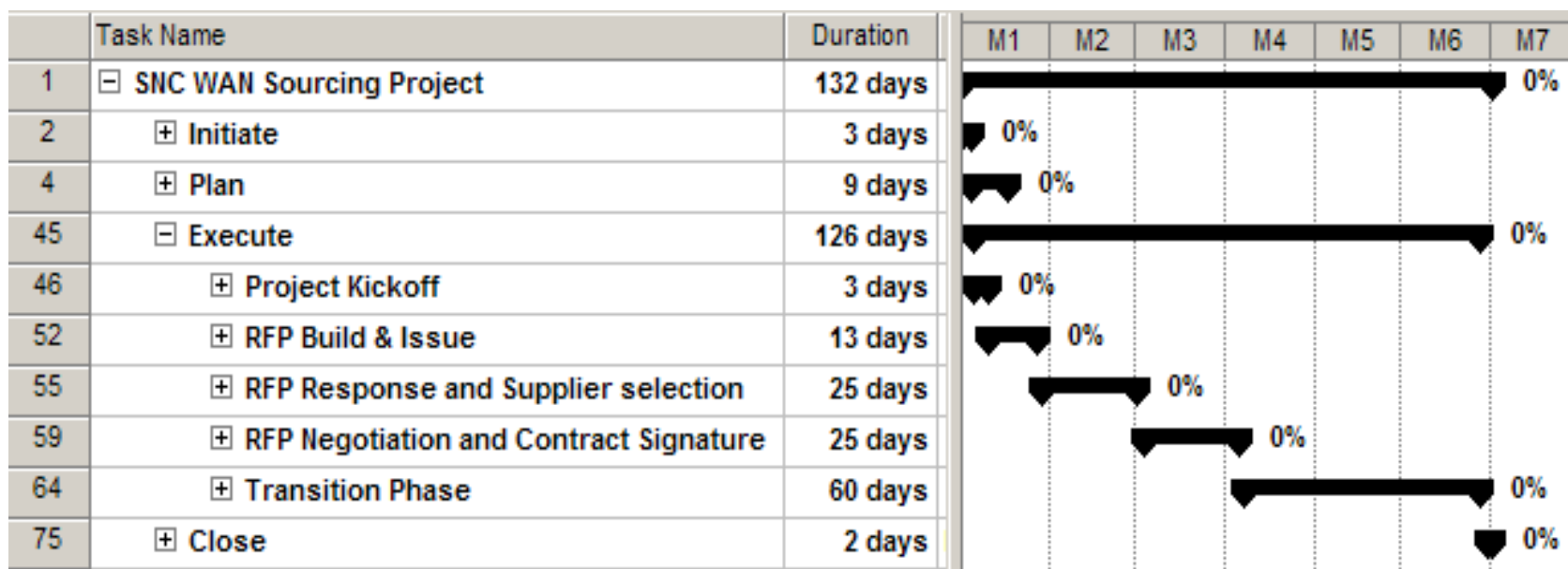
- Upgrade of Service Levels to market norms
- Enhanced network monitoring and improved detection and resolution of network issues
- Enhanced network security
- Eliminates challenges of maintaining, retaining and attracting staff with requisite skill sets
- Embedded technology evolution

Recommendation 2 – Financial Model

State of North Carolina - INSA		
Alternative # 3 - Sourcing all WAN Summary		
Financial Summary - One Year Total		
Current Costs (Operating & Capital)	\$21,546,831	recurring
New Cost (Operating & Capital):		
Project Investment (Capital)	\$0	
Project One-Time Costs	\$4,959,369	
Total Project Costs	\$4,959,369	
Future Costs (Operating & Capital)	\$19,304,861	
Total Estimated Savings	(\$2,717,399)	-13% Savings
Return on Investment (ROI)	-55%	
Financial Summary - Five Year Total		
1st year Return on Investment (ROI)	-55%	
Total ROI	126%	
Total Project Costs	\$4,959,369	
Projected Capital Savings	\$0	
Projected Operating Savings	\$6,250,481	
Total 5 Year Savings	\$6,250,481	
Annual Recurring Savings / (Cost Increase)	10%	by 2 nd year
Total 5 Year Savings / (Cost Increase)	6%	
Net Present Value (NPV) @ SNC 0.97%	\$5,931,516	
Internal Rate of Return (IRR)	35%	
Payback Period	2.2 Year(s)	

Recommendation 2 – High Level Transition Plan

Estimated to be a 6 Month Procurement and Transition Project



State of North Carolina

Infrastructure Study and Assessment (INSA)

Recommendations

Sourcing Recommendations

- **Risks and Risk Mitigation**
- **Critical Success Factors**

Risks Related to Sourcing Recommendations – 1 of 2

Risk	Mitigation Steps
Not attaining market terms and conditions, service levels and price	<ul style="list-style-type: none"> • Use external Legal counsel specialized in sourcing • Use external sourcing advisor
Loss of Key Staff and Institutional Knowledge	<ul style="list-style-type: none"> • Identify key staff to manage outsourcing relationship and strategic technology decisions • Develop and execute a communications plan • Communicate clearly and frequently • Ensure key employees are aware of their disposition during and after the project • Create incentive program to retain critical staff • Deliver targeted communications to key skills group • Ensure Change Management Plan has retention objective
Adhere to business case procurement timeframes	<ul style="list-style-type: none"> • Employ a structure project management process to ensure project milestones are managed • Establish a dedicated procurement core team that is comprised of relevant subject matter experts and augmented as appropriate with key stakeholders
Transition delays	<ul style="list-style-type: none"> • Establish Sourcing Management Organization prior to contract award. • Use integrated teams consisting of operational, procurement, legal and support resources

Risks Related to Sourcing Recommendations – 2 of 2

Risk	Mitigation Steps
Agency “Buy-In”	<ul style="list-style-type: none"> • Establish IT Shared Services Governance Framework • Hold regular communication meetings with Agencies • Solicit and address Agency concerns about the project • Develop and communicate change plans specific to each Agency. • Ensure Agencies understand project timelines and changes in interfaces • Support for outsourcing is evident in both the Governor’s Office and in the General Assembly
Having to comply with a more structured and procedure-driven service delivery organization	<ul style="list-style-type: none"> • Develop Service Levels in the agreement that provide response and resolution performance equal to or greater than existing levels.
Lock in to External Service Provider	<ul style="list-style-type: none"> • No exclusivity for base and new services • Build terms into contract regarding exit rights and termination assistance • Right to terminate for cause or convenience • Documentation owned by State • Termination assistance clauses in contract

Critical Success Factors and Imperatives Related to Sourcing Recommendations

The following critical success factors and imperatives must be addressed:

- **Support for outsourcing must be evident in both the Governor's Office and the General Assembly**
- **A comprehensive communication and change management program must be developed and implemented from the start of the procurement activity**
- **Staff responsible for delivering the services to be outsourced must remain accessible through the services transition period, to affect knowledge transfer of the operations from the State to an External Service Provider. This may require precluding staff transfers prior to the completion of transition**
- **A dedicated procurement core team must be established that is comprised of relevant subject matter experts and augmented, as appropriate, with key stakeholders**
- **A formal Vendor / Sourcing Management Organization (SMO) must be established well in advanced of contract award**

State of North Carolina

Infrastructure Study and Assessment (INSA)

Recommendations

Recommendation 3:

**Consolidate into ITS Service Desk Services
from selected agencies (DOR, ESC, DENR and
CCPS) Details**

Recommendation 3 - Consolidate into ITS Service Desk Services from selected agencies (DOR, ESC, DENR and CCPS)

Scope

- Consolidation of Service Desks on to a common service delivery framework
- Utilize existing processes to affect consolidation

Financial Benefits

- Cost savings estimated at \$8.9 million over five (5) years
- Six (6) month pay-back

Other Benefits

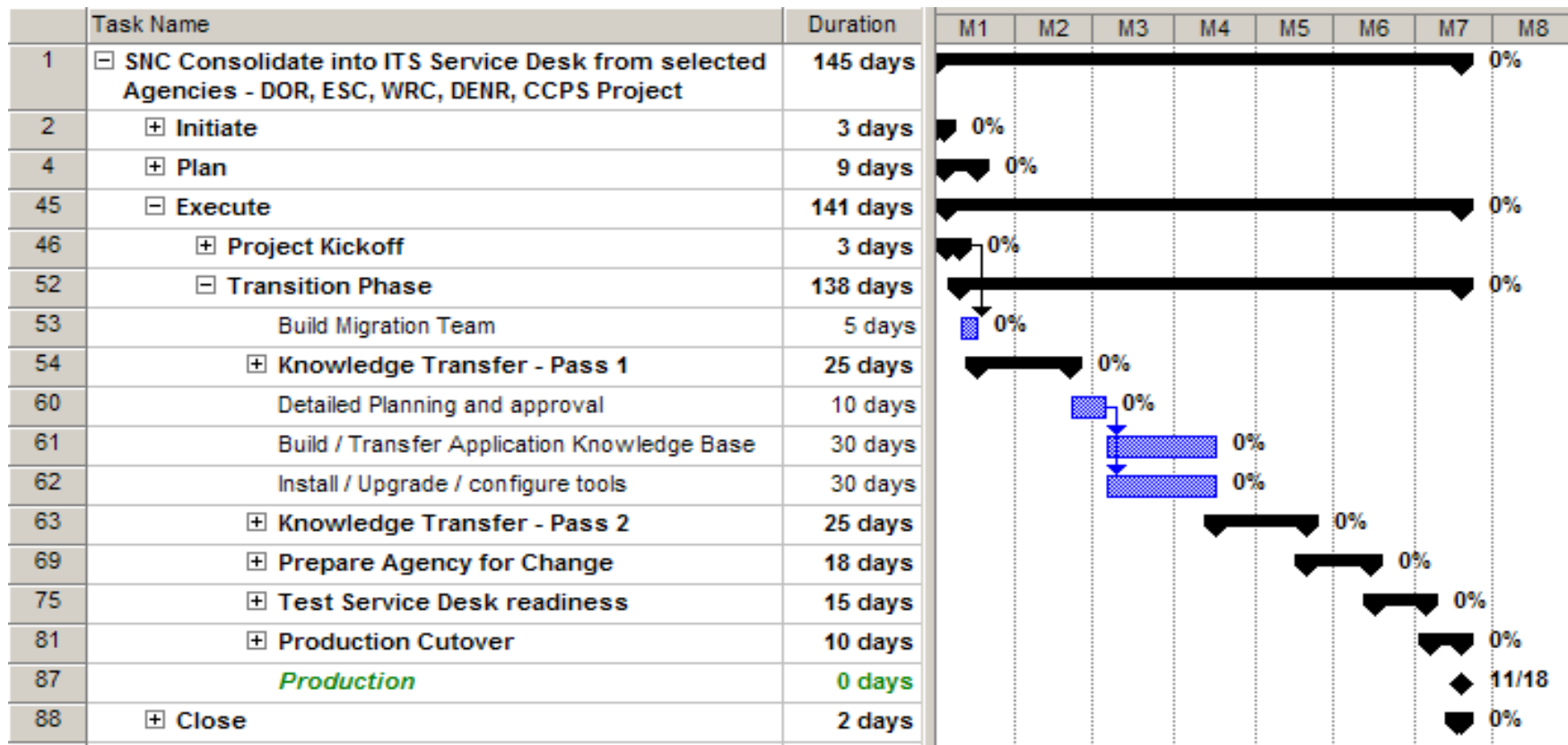
- Leverages existing ITS resources
- Rationalize aggregate staff and optimize skill sets
- Increases volume of incident and service request data to serve as input to continuous improvement programs

Recommendation 3 – Financial Model

State of North Carolina - INSA		
Alternative #25 - Consolidate into ITS Service Desk from selected Agencies - DOR, ESC, WRC, DENR, CCPS Summary		
Financial Summary - One Year Total		
Current Costs (Operating & Capital)	\$2,678,588	recurring
New Cost (Operating & Capital):		
Project Investment (Capital)	\$0	
Project One-Time Costs	\$935,589	
Total Project Costs	\$935,589	
Future Costs (Operating & Capital)	\$691,983	
Total Estimated Savings	\$1,051,016	39% Savings
Return on Investment (ROI)	112%	
Financial Summary - Five Year Total		
1st year Return on Investment (ROI)	112%	
Total ROI	962%	
Total Project Costs	\$935,589	
Projected Capital Savings	\$0	
Projected Operating Savings	\$8,997,438	
Total 5 Year Savings	\$8,997,438	
Annual Recurring Savings / (Cost Increase)	74%	by 2 nd year
Total 5 Year Savings / (Cost Increase)	67%	
Net Present Value (NPV) @ SNC 0.97%	\$8,714,805	
Internal Rate of Return (IRR)	211.6%	
Payback Period	0.5 Year(s)	

Recommendation 3 – Transition Plan

Estimated to be a 7 Month Consolidation Project



State of North Carolina

Infrastructure Study and Assessment (INSA)

Recommendations

Recommendation 4:

**Consolidate into ITS Servers from selected agencies (ESC, CCPS, DHHS, DOT and WRC)
Details**

Recommendation 4 - Consolidate into ITS Servers from selected agencies (ESC, CCPS, DHHS, DOT and WRC)

Scope

- Transfer Service Management responsibilities to ITS including:
 - Server monitoring and operations management
 - Planning and design services
 - Server provisioning management

Financial Benefits

- Cost savings estimated at \$23.7 million over five (5) years
- One half (1/2) year pay-back

Other Benefits

- Leverages existing ITS resources
- Rationalizes aggregate staff and creates opportunities for optimizing requisite skill sets
- Enables physical consolidation into an ITS data center

Recommendation 4 – Financial Model

State of North Carolina - INSA

Alternative # 22 - Consolidate into ITS Servers from select Agencies – ESC, CCPS, DHHS, DOT, WRC Summary

Financial Summary - One Year Total

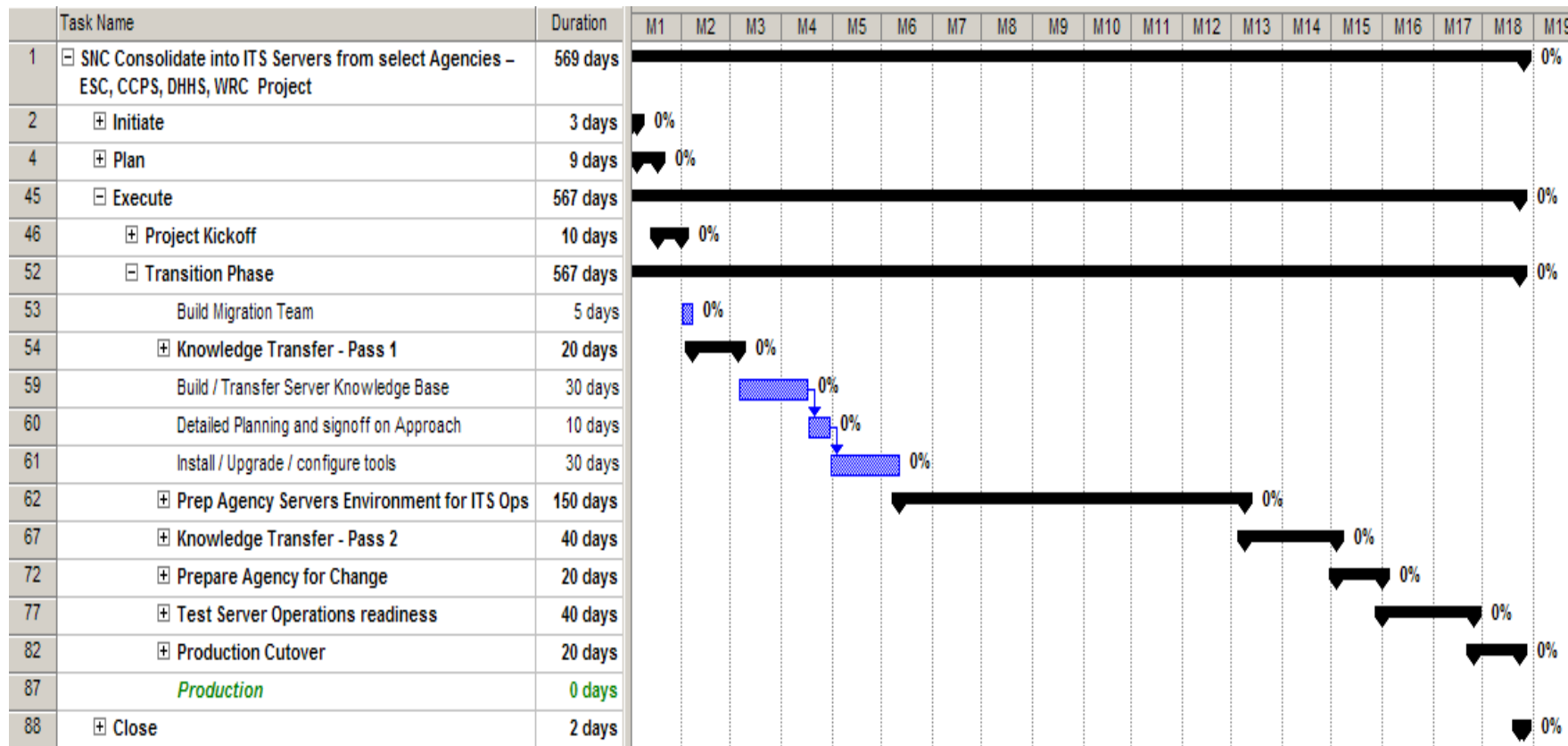
Current Costs (Operating & Capital)	\$23,479,210	recurring
New Cost (Operating & Capital):		
Project Investment (Capital)	\$0	
Project One-Time Costs	\$2,772,942	
Total Project Costs	\$2,772,942	
Future Costs (Operating & Capital)	\$18,170,002	
Total Estimated Savings	\$2,536,266	11% Savings
Return on Investment (ROI)	91%	

Financial Summary - Five Year Total

1st year Return on Investment (ROI)	91%	
Total ROI	857%	
Total Project Costs	\$2,772,942	
Projected Capital Savings	\$0	
Projected Operating Savings	\$23,773,098	
Total 5 Year Savings	\$23,773,098	
Annual Recurring Savings / (Cost Increase)	23%	by 2 nd year
Total 5 Year Savings / (Cost Increase)	20%	
Net Present Value (NPV) @ SNC 0.97%	\$23,017,759	
Internal Rate of Return (IRR)	190.5%	
Payback Period	0.5 Year(s)	

Recommendation 4 – High Level Transition Plan

Estimated to be a 18 Month Consolidation Project



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Recommendations

Consolidation Recommendations

- **Risks and Risk Mitigation**
- **Critical Success Factors**

Risks

Related to Consolidation Recommendations

Risk	Mitigation Steps
Agency “Buy-In”	<ul style="list-style-type: none"> • Hold regular communication meetings with Agencies • Solicit and address Agency concerns about the project • Develop and communicate change plans specific to each Agency. • Ensure Agencies understand project timelines and changes in interfaces
Having to comply with a more structured and procedure-driven service delivery organization	<ul style="list-style-type: none"> • Develop Service Levels in the agreement that provide response and resolution performance equal to or greater than existing levels.
Inadequate knowledge transfer	<ul style="list-style-type: none"> • Include knowledge transfer checkpoints in project plan • Oversee transfer of activities including knowledge transfer • Research and use best practice approach in knowledge transfer • Review level and depth of documentation created during knowledge transfer

Risks Related to Consolidation Recommendations

Risk	Mitigation Steps
Agency “Buy-In”	<ul style="list-style-type: none"> • Hold regular communication meetings with Agencies • Solicit and address Agency concerns about the project • Develop and communicate change plans specific to each Agency. • Ensure Agencies understand project timelines and changes in interfaces
Having to comply with a more structured and procedure-driven service delivery organization	<ul style="list-style-type: none"> • Develop Service Levels that are consistent with business drivers
Inadequate knowledge transfer	<ul style="list-style-type: none"> • Include knowledge transfer checkpoints in project plan • Oversee transfer of activities including knowledge transfer • Research and use best practice approach in knowledge transfer • Review level and depth of documentation created during knowledge transfer
Loss of Key Staff and Institutional Knowledge	<ul style="list-style-type: none"> • Consider transfer of key agency subject matter experts into ITS • Develop and execute a communications plan • Communicate clearly and frequently • Ensure key employees are aware of their disposition during and after the project • Deliver targeted communications to key skills group

Critical Success Factors and Imperatives Related to Consolidation Recommendations

The following critical success factors and imperatives must be addressed:

- **All identified Participating Agencies IT infrastructure services must be consolidated to achieve the benefits of the recommendation**
- **Existing consolidated Participating Agencies customer satisfaction levels must be improved**
- **Larger Agencies must be consolidated first**
- **Non-consolidated Participating Agency staff currently delivering the services to be consolidated must remain accessible through the services transition period**
- **A comprehensive communication and change management program must be developed and implemented prior to starting consolidation**

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Recommendations

Implementation Considerations Related to All Recommendations

Implementation Considerations Related to All Recommendations

- There are no inherent interdependencies across the recommendations. However, synergies may be achieved in sequencing the implementation of the recommendations. For example, concurrent execution of the Mainframe and WAN outsourcing procurements will yield lower transacting costs and enable consideration of a single or multiple External Service Provider solution
- An overarching governance framework for IT shared services should be established, either through the reconstitution of the Information Technology Advisory Board, or the creation of a successor body, to provide advice and guidance to the SCIO and ITS with regard to planning, implementing and delivering IT services
- In conjunction with implementing the recommendations, a comprehensive communication and change management program must be developed and implemented to facilitate organization alignment with recommendation goals, and affect the changes needed to attain identified benefits

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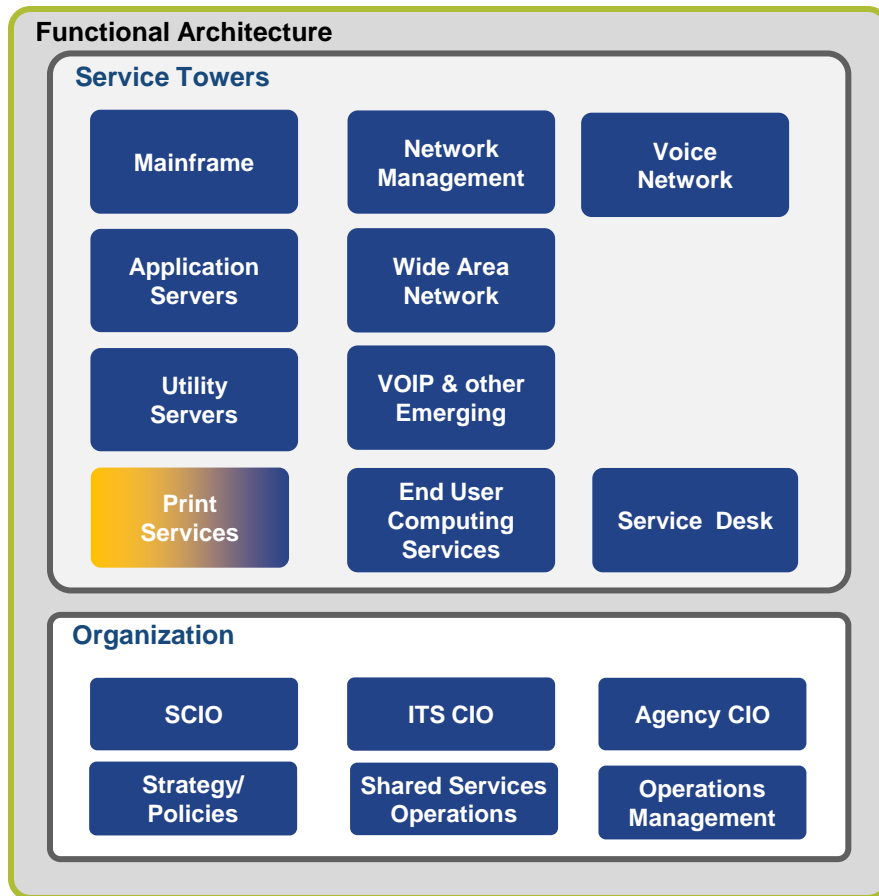
Recommendations

Service Delivery Models

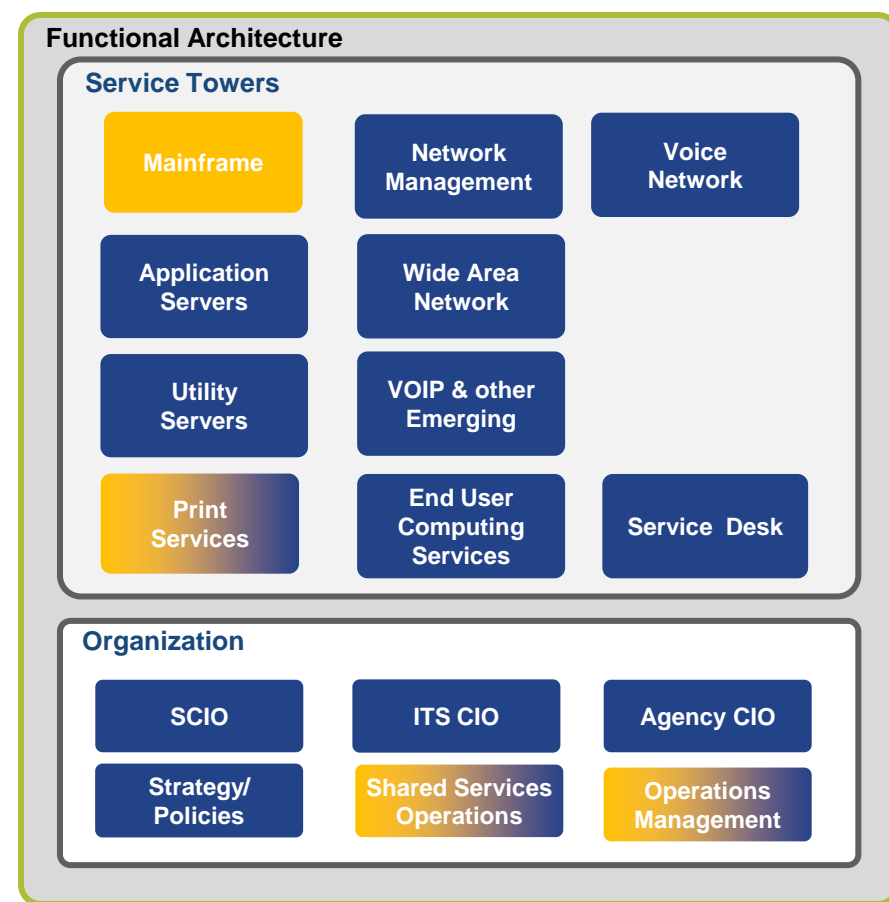
Service Delivery Model

Mainframe Services

Current State



Future State



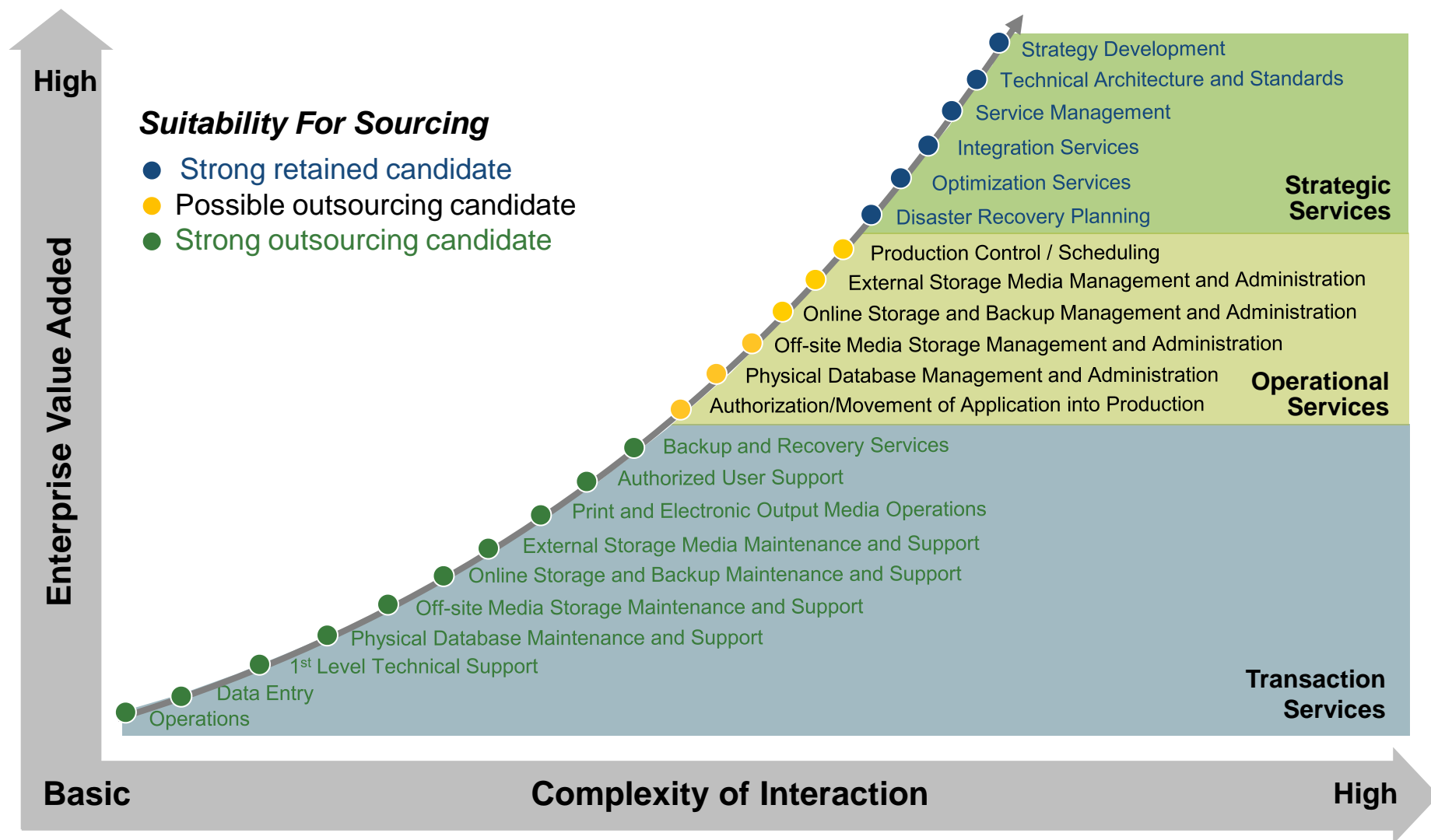
Outsource

Partial O/S

Retain

Service Delivery Model – Mainframe Services

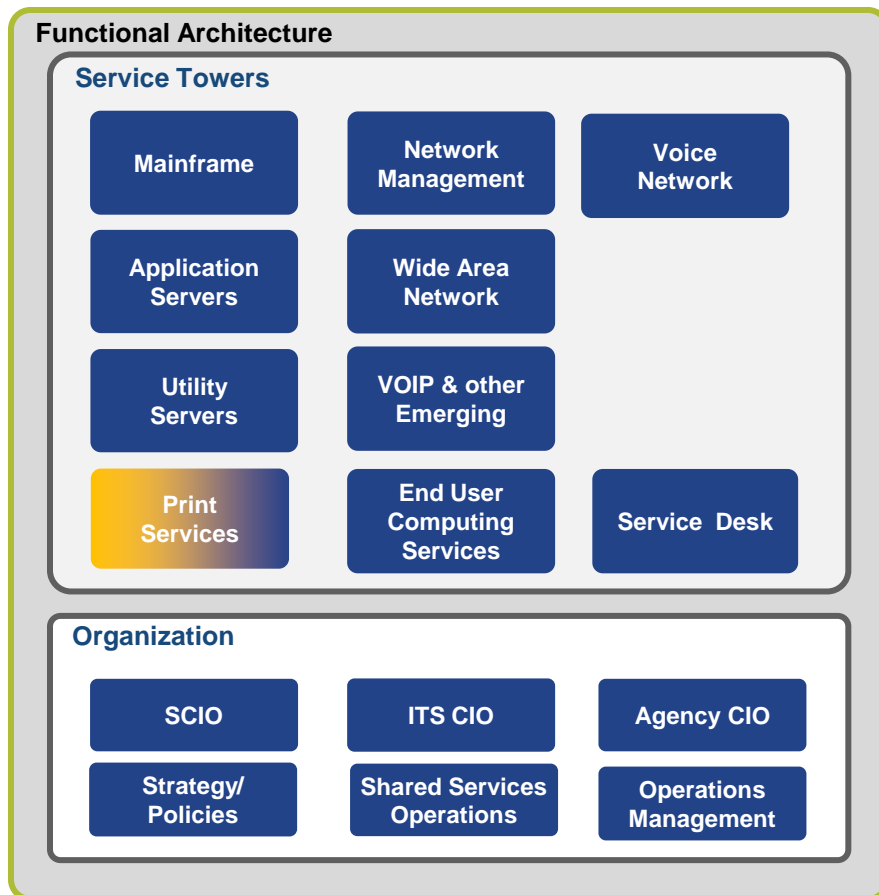
Functional Perspective



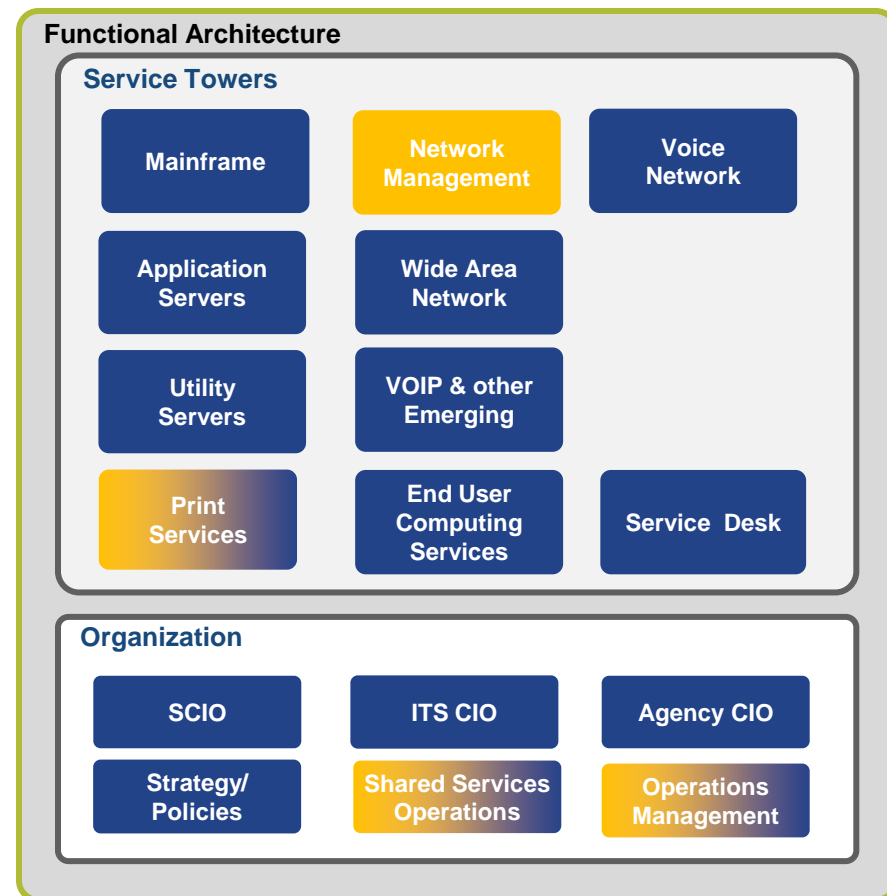
Service Delivery Model

Managed Network Services

Current State



Future State



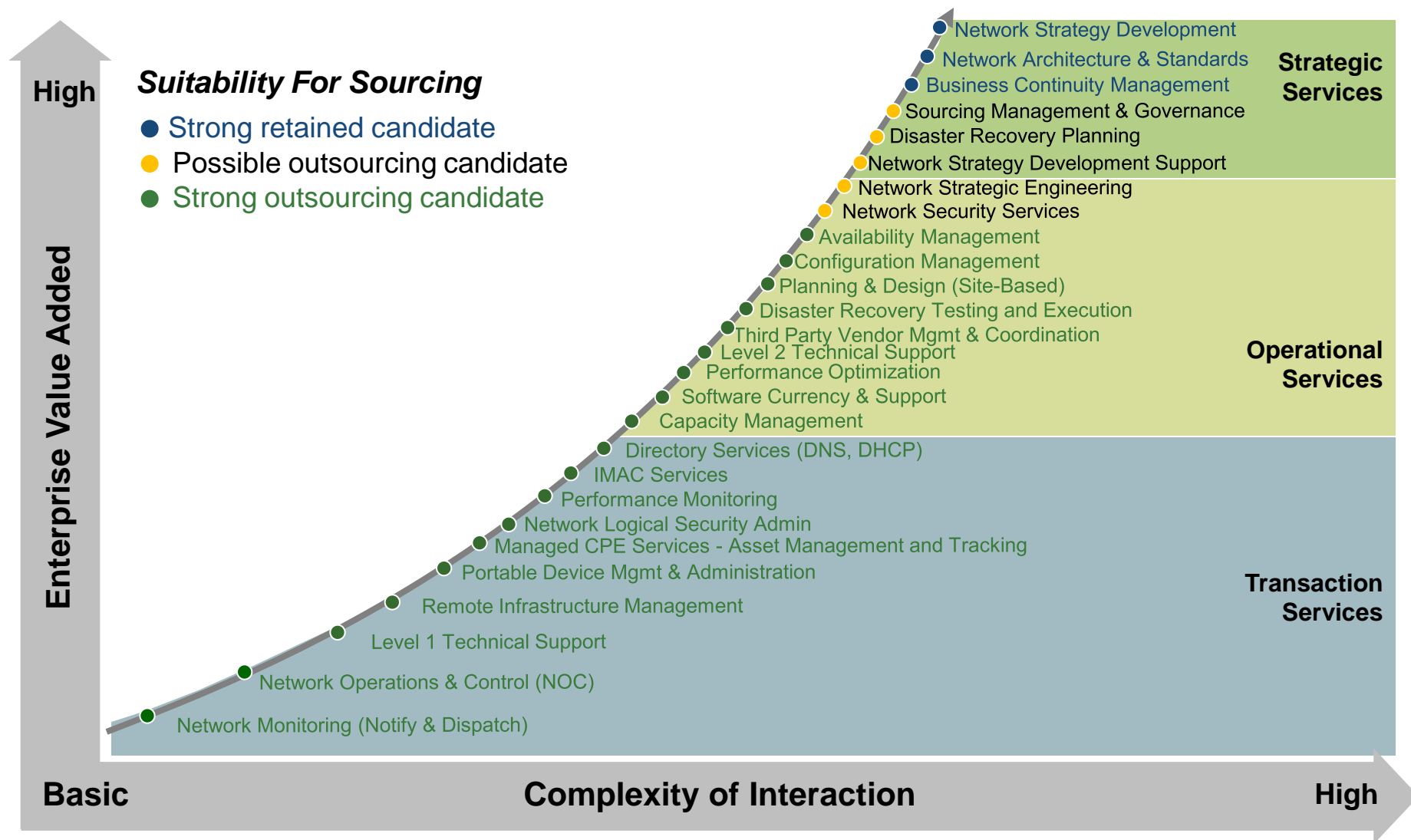
Outsource

Partial O/S

Retain

Service Delivery Model – Managed Network Services

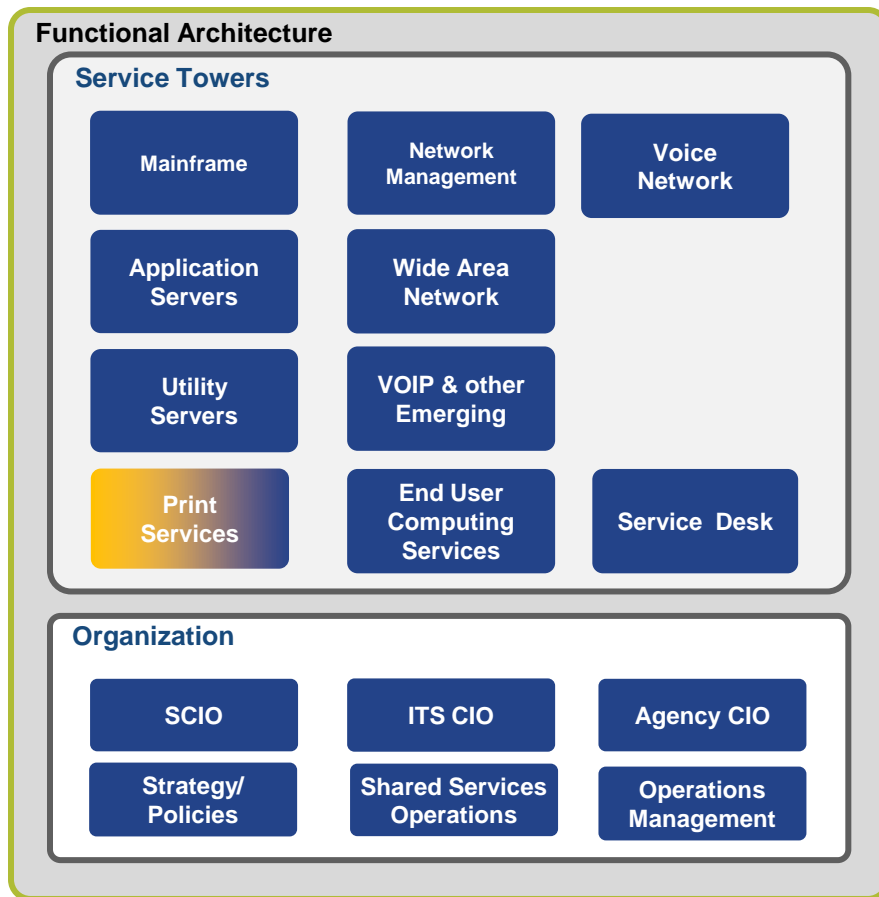
Functional Perspective



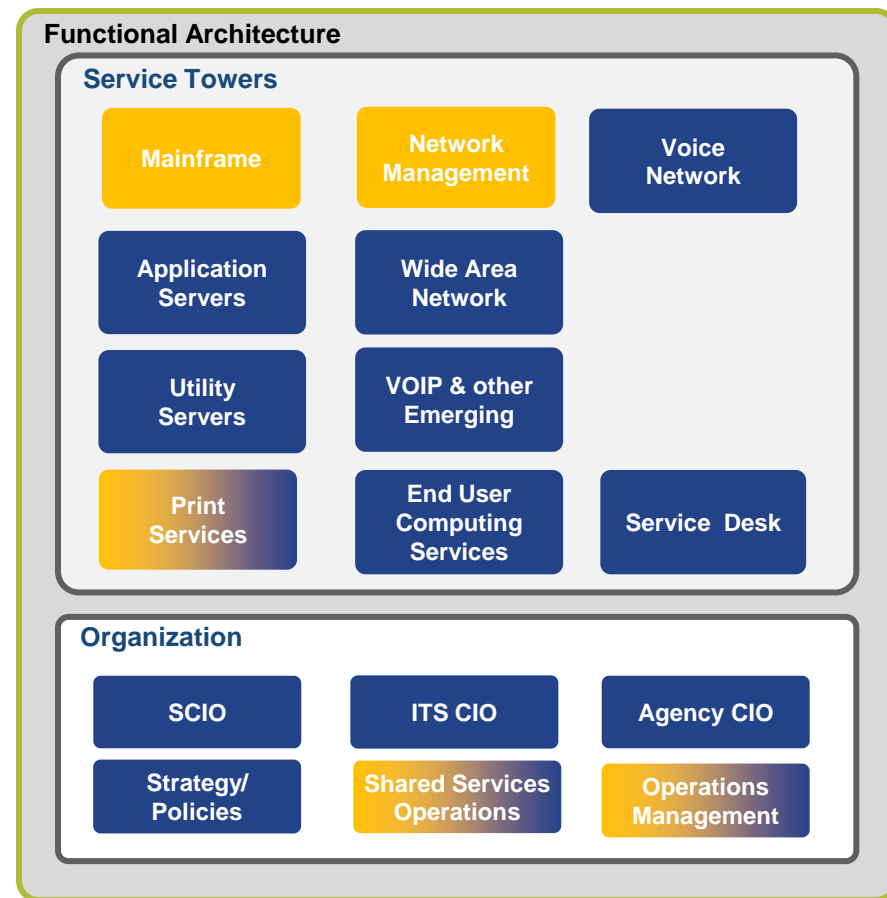
Service Delivery Model

Mainframe and Managed Network Services

Current State



Future State



Outsource

Partial O/S

Retain

State of North Carolina

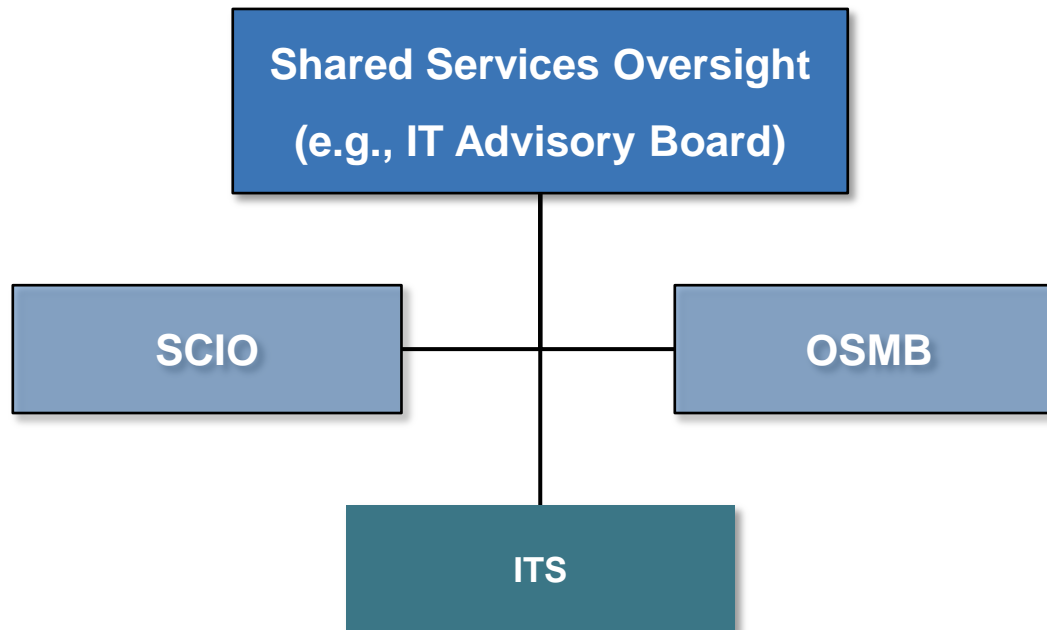
Infrastructure Study and Assessment (INSA)

Recommendations

Sourcing Management and Governance

IT Shared Services Governance Framework

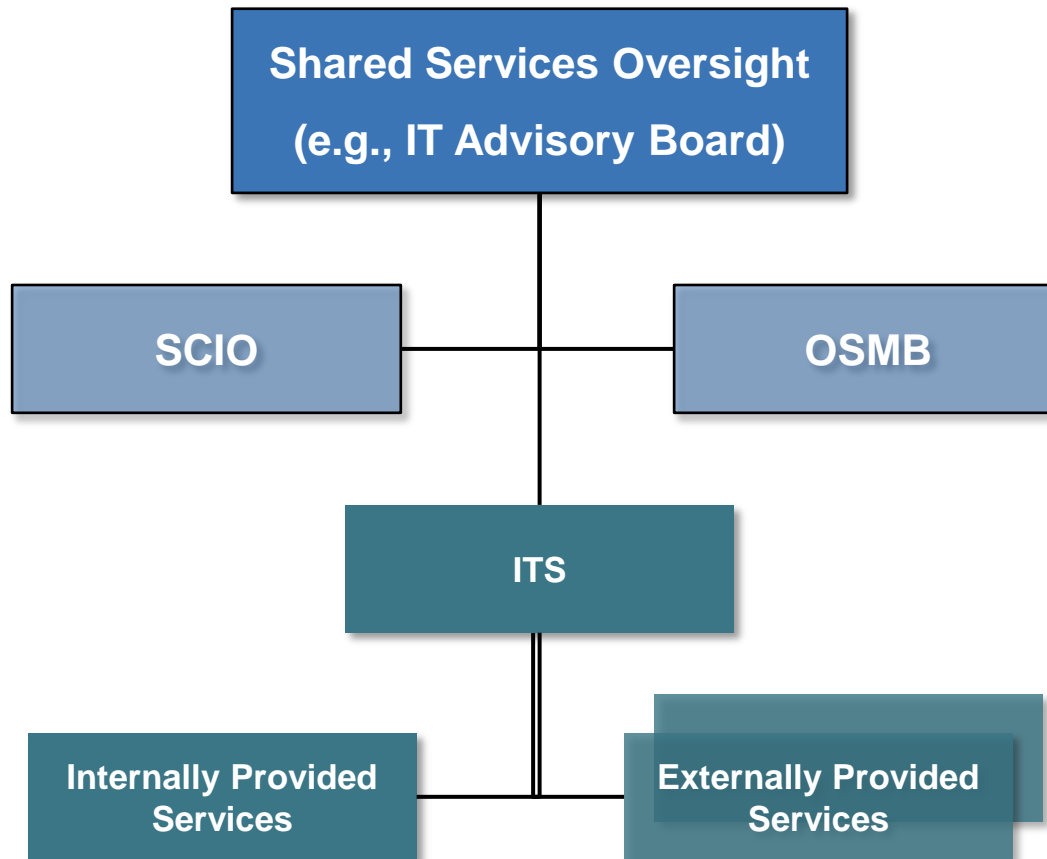
An Overarching Governance Framework for IT Shared Services should be established to provide advice and guidance to the SCIO and ITS.



By having an oversight body external to the IT shared service organization, IT shared services can be objectively evaluated with regard to alignment with business needs and overall value propositions.

Outsourcing Governance Framework

ITS will continue to have accountability for outsourced services and have direct management and oversight of the outsourcing relationship.



A companion outsourcing governance framework should be implemented within ITS.

Outsourcing Governance Framework

Executive Steering Committee

Management Committee

Service Delivery Committee

Planning, Strategy & Function Steering Committee

Outsourcing Governance Framework Bodies

Committees should be established to manage performance, planning and issue escalation at the strategic and tactical levels

Outsourcing Governance Framework

Executive Steering Committee

Management Committee

Service Delivery Committee

Planning, Strategy & Function Steering Committee

Mission	Meetings	Participants
<ul style="list-style-type: none"> Reviews and approves sourced functional area strategic plans and direction 	2-4 times / year	<ul style="list-style-type: none"> Chair: ITS CIO Participants: ITS Agreement Manager, ITS CFO, CTO and Service Provider equivalents
<ul style="list-style-type: none"> Monitors overall sourcing performance Service levels, Agreement compliance, change management, customer satisfaction, invoice questions, issue escalation 	1-2 times per month through transition; monthly or quarterly for steady state	<ul style="list-style-type: none"> Chair: ITS Agreement Manager Participants: ITS Service Delivery Leads, PMO, Finance Mgr, Contract Administrator, and equivalent Service Provider staff
<ul style="list-style-type: none"> Day-to-day management of sourced functions 	Daily or weekly through transition, thereafter typically weekly	<ul style="list-style-type: none"> Chair: ITS Service Delivery Leads Participants: ITS Business Relationship Management Manager, Equivalent Service Provider staff
<ul style="list-style-type: none"> Cross-functional committees reviewing strategic direction and design of shared services Can include planning, strategy, technology, business operations, and other areas as needed 	Quarterly and as needed	<ul style="list-style-type: none"> Strategy and planning team with equivalent Service Provider staff



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